



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/760,281 | 01/21/2004 | Wen-Ho Chen | MR2349-984 | 9837 |

4586 7590 10/31/2006

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

| |
|----------|
| EXAMINER |
|----------|

REHM, ADAM C

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2875

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/760,281 | Applicant(s) CHEN ET AL. | |
| | Examiner Adam C. Rehm | Art Unit 2875 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-30 is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

(1) The anode and cathode and two pads per at least Claim 2.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 2 is objected to because of the following informalities: Applicant is advised to maintain consistent terminology to avoid antecedent basis issues. It appears that "the LED" in Lines 1-2 should be changed to "each LED". Appropriate correction is required.

3. Claims 28-30 are objected to because of the following informalities: It appears Applicant intended to depend Claim 28 from 24 as opposed to 14. Appropriate correction is required to avoid double patenting issues.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 14, 15, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by TAKEGUCHI (US 2002/0175632), which discloses an LED source comprising:

- A PCB with a plurality of side faces (7);
- A plurality of RGB LED units arranged on one side face of the PCB (5 a/b/c/d Fig. 10);
- A control unit disposed outside the LED units and connected to each of said LEDs of like color in the units, the control unit being operable to control a

driving circuit to each LED connected thereto, whereby each of the RGB LED units emit a white light with stable color temperature (10); and

- Wherein the LED has an anode and cathode connected to two pads (5 a/b/c/d inherent LED property).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 16, 17, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over TAKEGUCHI (US 2002/0175632) and ROBERGE ET AL. (US 2005/0128751). While TAKEGUCHI substantially discloses the claimed invention, TAKEGUCHI does not disclose a memory or IC. However, ROBERGE teaches a memory for executing desired functions (Paragraph 230) and an IC for responding to instructions (Paragraph 229). It would have been obvious to one of ordinary skill in the art at the time of invention to modify TAKEGUCHI and use the memory and IC as taught by ROBERGE in order to obtain the well-known benefits therefrom.

6. Claims 5-7, 18-20 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over TAKEGUCHI (US 2002/0175632) and MATSUI ET AL. (US 6,857,767). TAKEGUCHI substantially discloses the claimed invention, but does not disclose a PCB of a thermally conductive material or aluminum or copper. However, MATSUI teaches the use of a thermally conductive PCB of aluminum (Column 4, Lines

Art Unit: 2875

59-65) and copper (Column 4, Lines 33-37) in order to heighten luminous efficacy and increase LED lifespan (Column 1, Lines 41-49) and provide a circuit. It would have been obvious to one of ordinary skill in the art at the time of invention to modify TAKEGUCHI and use the thermally conductive PCB and copper wiring as taught by MATSUI in order to obtain the known benefits therefrom. Likewise, Applicant seems to arbitrarily claim well-known thermally conductive materials and fails to allege that the particular claimed materials solve any stated problems or is for any particular purpose. It appears that the invention would perform equally well with any thermally conductive material. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over TAKEGUCHI (US 2002/0175632), which discloses a control unit for controlling RGB LEDs (see above). However, TAKEGUCHI does not disclose a separate controller for each color LED. Notably, patentability is not afforded by merely duplicating existing parts and/or making separate a formerly integral structure, which involve only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Applicant has not disclosed that separate controllers solve any stated problem or are for any particular purpose and it appears that the TAKEGUCHI controller would perform equally well.

8. Claims 9, 10, 13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over TAKEGUCHI (US 2002/0175632). TAKEGUCHI discloses the

Art Unit: 2875

claimed invention, but does not specifically disclose pins of varying numbers. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize pins of varying numbers, since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

9. Claims 11, 12, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over TAKEGUCHI (US 2002/0175632). TAKEGUCHI discloses the claimed invention, but does not specifically disclose LEDs connected in series or in parallel. However, connections via parallel or series are well known in the art and Applicant seems to arbitrarily claim both with no motivation for any particular one. As such, it would have been obvious to one of ordinary skill in the art at the time of invention to connect the LEDs in series or parallel.

Conclusion/Correspondence


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACR
8/3/2006



THOMAS M. SEMBER
PRIMARY EXAMINER